

SC Paramedic Refresher Course (Including Transitional material)

The SC Paramedic refresher course follows the guidelines and breakdown of the NSC EMT-Paramedic 48 hour refresher. This 48 hour refresher course is a suggested “minimum” hour course. SC Authorized Training Institutions and SC approved IST Programs may add more hours to the course if needed.

Topic	Hours
Preparatory	6
Airway Management	6
Trauma	10
Medical	18
Special Considerations	6
Operations	2
Total	48**

All transition material identified in this document below may be a part of the minimum 48 hour course, or additional hours may be added, as needed, to cover the transition material.

Below is the breakdown of the Paramedic 2009 course. The material considered as “transitional” material is presented in italics, along with the suggested time frames needed to cover the material.

Documenting the Transitional Material to the National Registry

All Training institutions / IST Programs using the SC Paramedic Refresher / Transition Course to document a candidate's training to the National Registry must issue a Certificate of Course Completion to each candidate that contain the following information:

- ✓ *NREMT Candidate's Name*
- ✓ *EMT-Paramedic to Paramedic Transition Course Completion Date*
- ✓ *The name of the sponsoring agency (Training Institution or IST Program)*
- ✓ *Signature of the sponsoring agency (Director, Training Officer, etc.)*
- ✓ *The following statement:*
 - ***"Name of Candidate"** has completed a state-approved EMT-Paramedic to Paramedic transition course.*

SC Paramedic Transition Course Material

Section Titles (Divisions) *In Italics: Gap Analysis of NSC to 2009 Educational Standards - Material that should be emphasized with suggested time limits.*

Preparatory Essential content 90 min / Supplemental content 30 min.

EMS Systems	(Essential content 15min.)
<i>Provide detailed discussion on patient safety issues, decreasing medical errors, & required affective/behavioral characteristics.</i>	
Research	(Essential content 5min.)
<i>Information on evidence based decision making</i>	
Workforce Safety & Wellness	(Supplemental content 10min.)
<i>Emphasize the difference between BSI & PPE, Discuss bariatric issues, neonatal isolettes & medical restraint.</i>	
<i>The 1998 EMT-P NSC mentioned CISM. The new standards does not use that term instead focusing more on stress management issues.</i>	

Documentation (Essential content 15 min.)

The Health Insurance Portability and Accountability Act (HIPPA) did not exist when the 1998 EMT-P NSC was authorized.

Provide a detailed discussion of medical/legal and ethics for HIPPA overview.

EMS System Communication (No Transitional material)

Therapeutic Communications (Essential content 15min.)

Provide detailed discussion about cultural competence issues.

Medical/Legal Issues (Essential content 60min.)

Health Insurance Portability and Accountability Act (HIPAA) did not exist when the 1998 EMT-P National Standard Curriculum was authored; increased depth of discussion regarding advance directives; the term "end-of-life" was not previously used; there is an increased emphasis on end of life issues; increased depth and breadth on ethics. Provided a detailed discussion on all the above topics.

Anatomy & Physiology (Essential content 60min.)

The current recommendation calls for more comprehensive coverage of A&P than provided in the previous 1998 EMT-P National Standard Curriculum. Programs should evaluate their current A&P program to see how much upgrade they need to reach a comprehensive and complex understanding, especially in the cardiovascular, respiratory, and neurological systems.

Medical Terminology (No transitional material)

Although not detailed, this content is new to this level.

Physiology (Content integrated into appropriate sections)

The current recommendation calls for more comprehensive coverage of pathophysiology than provided in the previous 1998 EMT-P National Standard Curriculum. Programs should evaluate their current pathophysiology program to see how much upgrade they need to reach a comprehensive and complex understanding, especially in the cardiovascular, respiratory, and neurological systems.

Life Span Development (No transitional material)

Public Health (Supplemental content 10min)

Consistent with the EMS Agenda for the Future, there is a greater emphasis on public health issues

Pharmacology (Essential material 75 min. / Supplemental material 5 min.)

Principles of Pharmacology (Essential material 30 min.)

Programs should evaluate their current pharmacology program to see how much upgrade they need to reach a comprehensive and complex understanding.

Medication Administration (Supplemental content 5min.)

Programs should evaluate their current pharmacology program to see how much upgrade they need to reach a comprehensive and complex understanding

Emergency Medications (Essential content 45 min.)

In the 1998 EMT-P National Standard Curriculum, there was no list of medications; the list in the IGs represents medications commonly used in numerous EMS systems and is a minimum list that all paramedics should know. Programs are encouraged to add to the list, but should not delete. This list may become dated quickly.

Airway Management, Respiration, and Artificial Ventilation

Essential content 90 min.

Anatomy & Physiology (Essential content 30 min.)

Confusion exists about the differences between oxygenation, ventilation, and respiration. The Education Standards were organized to attempt to highlight the differences between the concepts. There is a greater emphasis on ventilation and respirations and the importance of artificial ventilation. Research suggests that EMS can make a difference in this area.

Airway Management (Essential material 15 min.)

See note in A&P above.

Provide a detailed discussion of techniques of assuring a patent airway & consider age-related variations in pediatric & geriatric patients.

Respiration (Essential material 15min.)

See note in A&P above.

Provide a detailed discussion of the anatomy & physiology of the respiratory system, pathophysiology of respiration, assessment &

management of inadequate respiration & age-related variations in pediatric & geriatric populations.

Artificial Ventilation (Essential content 30 min.)

See note in A&P above.

Provide a detailed discussion in management of adequate & inadequate ventilation. Review of ventilation devices , & age-related variations.

Patient Assessment Essential content 60 min.

Scene Size Up (Essential content 5 min.)

Re-emphasis on scene safety

Primary Assessment (Essential content 10 min.)

Emphasize new terminology. Provide a detailed discussion of Primary Assessment

History-Taking (Essential content 10 min.)

Emphasize new terminology and detailed discussion of geriatric content.

Secondary Assessment (Essential content 10 min)

Emphasize new terminology. Provide a detailed discussion of Secondary Assessment.

Monitoring Devices (Essential content 25min.)

Includes capnography, chemistry analysis, arterial blood gas interpretation.

Reassessment (No additional time suggested)

New terminology that more closely mimics other health care professionals; more thorough than in the previous curriculum

Medicine Essential content 225 min. / Supplemental content 55 min.

Medical Overview (Essential content 30 min.)

Re-use of the new assessment terminology; emphasis on pathophysiologic basis; updated destination decisions for some medical conditions such as stroke and acute coronary syndrome

- Neurology (Essential content 15min.)
The term "demyelinating" was not used in the 1998 EMT-P National Standard Curriculum; more detailed information on stroke assessment and management
- Abdominal & Gastrointestinal Disorders (Essential content 15 min.)
In the 1998 EMT-P National Standard Curriculum, the topic was gastroenterology; new section on mesenteric ischemia, rectal foreign body obstructions and rectal abscess
- Immunology (Essential content 20 min.)
The term anaphylactoid is used here; that term was not used in the 1998 EMT-P National Standard Curriculum; transplant related problems and collagen vascular disease added
- Infectious Diseases (Essential content 15 min.)
This section should include updated infectious disease information, for Example methicillin-resistant Staphylococcus aureus, hepatitis, and Acquired Immune Deficiency Syndrome update; should include a discussion on cleaning and sterilizing equipment and decontaminating the ambulance
- Endocrine Disorders (Essential content 10 min.)
Added long term effects of diabetes and how the disease impacts other conditions. Provide a detailed discussion on diabetes.
- Psychiatric (Essential content 15min.)
Includes new material on excited delirium; other psychiatric conditions are re-categorized with an increase in depth and breadth. Emphasize new material on excited delirium.
- Cardiovascular (Essential content 45 min.)
Increased emphasis on anatomy, physiology and pathophysiology; acute coronary syndrome, 12-lead interpretation; updated information on heart failure
- Toxicology (Supplemental content 15 min.)
Includes section on over-the-counter medication toxicology
- Respiratory (Essential content 30 min.)
More in-depth evaluation of a patient with respiratory problems
- Hematology (Essential content 30 min.)
Reorganized with added section on blood transfusion reactions

- Genitourinary/Renal (Supplemental content 10 min.)
More detailed discussion of this organ system; urinary catheter management (not insertion)
- Gynecology (Supplemental content 15 min.)
Includes brief discussion of sexually transmitted diseases and pelvic inflammatory disease
- Non-Traumatic Musculoskeletal Disorders (Supplemental Content 5 min.)
Added section on disorders of the spine, joint abnormalities, muscles abnormalities, and overuse syndromes
- Diseases of the Eyes, Ears, Nose, & Throat (Supplemental Content 10 min)
New section emphasizing major eye, ear, nose, and throat disease

Shock & Resuscitation

Contents integrated throughout Trauma & Medical sections
Reorganized for emphasis, more pathophysiology

Trauma Essential content 120 min. / Supplemental content 125 min.
Programs should evaluate their current trauma program to see how much upgrade they need to reach a comprehensive and complex understanding .

- Trauma Overview (Essential content 15min.)
Discussion on the Centers for Disease Control (CDC) Field Triage Decision Scheme: The National Trauma Triage Protocol and trauma scoring
- Bleeding (Supplemental content 30 min.)
More detailed discussion
- Chest Trauma (Essential content 45 min.)
More detailed discussion-- Programs should evaluate their current trauma program to see how much upgrade they need to reach a comprehensive and complex understanding.
- Abdominal & Genitourinary Trauma (Supplemental content 15 min.)
More detailed discussion--- Programs should evaluate their current trauma program to see how much upgrade they need to reach a comprehensive and complex understanding.

- Orthopedic Trauma (Essential content 5 min.)
More detailed discussion--- Programs should evaluate their current trauma program to see how much upgrade they need to reach a comprehensive and complex understanding.
- Soft Tissue Trauma (No transitional material)
However, more detailed discussion--- Programs should evaluate their current trauma program to see how much upgrade they need to reach a comprehensive and complex understanding.
- Head, Face, Neck, & Spine Trauma (Essential material 30 min.)
More detail about neck eye, oral and brain injuries; emphasizes the harm of over ventilation in most situations
- Nervous System Trauma (Supplemental content 45 min.)
More detail on brain anatomy; emphasizes the harm of hyperventilation; references the Brain Trauma Foundation; increased emphasis on neurological assessment
- Special Considerations in Trauma (Supplemental content 30 min.)
All section new or increased emphasis
- Environmental Trauma (Environmental Emergencies) (No additional time)
All material at this level represents the same depth and breadth as at the EMT level
- Multi-System Trauma (Essential content 30 min.)
New material at this level; critical thinking skills emphasized, includes discussion of kinematics and blast injury

Special Patient Populations

Essential content 30 min. / Supplemental content 65 min.

- Obstetrics (Supplemental content 10 min.)
Added section on hyperemesis gravidarum
- Neonatal Care (Supplemental content 30 min.)
This section is much more detailed than in the previous version
- Pediatrics (Essential Content 30 min.)
This section is much more detailed than in the previous version
- Geriatrics (Supplemental content 15 min.)
Added section on Herpes zoster
- Patients With Special Challenges (Supplemental content 10 min.)
Added section on bariatrics

EMS Operations Essential content 40 min. / Supplemental content 10 min.

Principles of Safely Operating a Ground Ambulance

(Essential content 10 min.)

All material at this level represents the same depth and breadth as at the EMT level

Incident Management *(No transition material)*

Can be done as a co-requisite or as pre-requisite

All material at this level represents the same depth and breadth as at the EMT level

Multiple Casualty Incidents *(Essential content 10 min.)*

All material at this level represents the same depth and breadth as at the EMT level

Air Medical *(Supplemental 10 min.)*

All material at this level represents the same depth and breadth as at the EMT level

Vehicle Extrication *(No transitional material)*

All material at this level represents the same depth and breadth as at the EMT level

Hazardous Materials Awareness *(No transitional material)*

Can be done as a co-requisite or as pre-requisite

All material at this level represents the same depth and breadth as at the EMT level

Mass Casualty Incidents Due to Terrorism & Disaster

(Essential content 20min.)

All material at this level represents the same depth and breadth as at the EMT level. All new content. Provide a detailed discussion of the risks & responsibilities of operating on the scene of a natural or man-made disaster.

Total Summary of proposed time for planning purposes:

Essential content = 13.1 hrs.

Supplemental = 5.0 hrs.

The following restraint technique has been determined to be harmful and is no longer permitted: forceful restraint in a prone position, with wrists & ankles tightly tied together ("hobbled") behind the back.

Skill Considerations - Additional content that may be included:

- BiPAP, CPAP, PEEP
- ETCO₂ monitoring
- NG / OG tube
- Chest tube monitoring
- Access indwelling catheters and implanted central IV ports
- Morgan lens
- Administer physician-approved meds.